

“Human Beings Do Not Behave Like Test Tube Experiments”: Dorothy Dickins and the Science of Home Economics in Mid-Twentieth Century Mississippi

by Alison Collis Greene

“Unfortunately for the social scientist,” wrote home economics expert Dorothy Dickins in 1947, “human beings do not behave like test tube experiments.” Much as she believed in the objectivity of her scientific research, Dickins built her career on an ability to develop and understand human relationships. In this instance, she stressed the importance of matching field agents for land-grant schools with the families they studied. “Some agents can do satisfactory work with low-income families who would be dismal failures with families of mill owners, bank presidents, and cotton planters, and vice versa,” Dickins explained. “Agents should be selected for families rather than families for agents.” The success of a given field agent mattered because each family that refused to participate in a given survey, interview, or study meant a possible distortion of the results. Dickins believed good relationships were necessary to produce good science. The historian who hopes to understand Dickins’s science might begin, then, with the relationships she built in its service.¹

Dorothy Dickins, founder and head of Mississippi State College’s Department of Home Economics Research, spent her forty-year career studying black and white Mississippians’ diets, cooking habits, purchasing preferences, living conditions, and much more. She compared Mississippians’ living standards and their childrens’ prospects for upward mobility by race, class, geography, family size, and means of employment. Each of these studies required the cooperation of subjects with the field agents and home demonstration agents who conducted

¹ Dorothy Dickins, “Some Problems of Sampling in Connection with Studies of Family Economics,” *Social Forces* 25, no. 3 (March 1947): 327-332 (quotations on p. 328).

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the surveys and interviews. Dickins wrote both about and from her agents' experiences. Thus, many of her detailed, thoughtful quantitative analyses of Mississippians' lives also include a wealth of qualitative, first-hand observations.

This kind of work was once central to experiment stations and extension services, and Dickins was one of the most highly qualified, active, and prolific home economists employed by any land-grant university. Her long and active career provides an opportunity to examine the importance of the relationships that land-grant researchers built in the course of their work, as well as the important relationship of the historian to those researchers.²

In Dickins's case, these relationships are important on three levels. First, the relationships between academic researchers and the extension, or home demonstration, agents who disseminated their findings. Second, the relationships between the scientists—very often women—in departments of home economics, and the scientists—almost all men—who researched new growing methods, use of new equipment, and many other subjects. The agricultural experiment station and extension work complemented each other in significant ways, and neither would have been as effective without the other. And third, the relationships—one-way though they often were—between those agricultural scientists and the historians who study them or use their work.

Though Dorothy Dickins died in 1975, many Starkville residents remember her vividly. Women who worked for her as adolescents talk eagerly about a summer they spent scrubbing test tubes, a particular experience that awed them as adolescents, or simply describe her powerful presence. Dickins is a local legend in part because she was a well-regarded professional woman with a Ph.D. from the University of Chicago and a commitment to scientific research in mid-twentieth century Mississippi. But what also becomes clear is that Dorothy Dickins's work both built on and contributed significantly to the more traditional, and more common, kind of agricultural research that took place outdoors in the fields rather than in kitchens and living rooms.³

² On Dickins's biography and perspective, see Betsy Stark and Lois Kilgore, *A Tribute to Dorothy Dickins* (Starkville: Mississippi Agricultural and Forestry Experiment Station, 1974).

³ *Ibid.*

Women have been central to the work of land-grant schools since their beginning, just as women's work on the land itself has long been essential. Since the Smith–Lever Act created cooperative extension agencies in 1914, home demonstration agents have played an important role at land-grant universities. When the Purnell Act of 1925 further granted land-grant schools funds for social science research, a new group of home economics researchers arrived on the scene.⁴

Dickins, who began her career at Mississippi State in 1925, completed her Ph.D. in family economics at the University of Chicago just a few years later. Her early training and research interests revolved around nutrition, and she immediately set to work to study the food choices and preparation methods common among Mississippians. Dickins, who worked closely with the state's home demonstration agents to coordinate her research projects, emphasized the importance of a close relationship between the researcher and the extension agent, whom she described as the intermediary between the researcher and the homemaker or farm family. These collaborative relationships between extension researchers and field agents have allowed for the kind of ground-level studies (including studies *of the ground*) unavailable anywhere else.⁵

In Dickins's case, this approach involved studies of the lives and daily



Dorothy Dickins, courtesy Mississippi State University Libraries.

⁴ B. Youngblood, "The Integration of Research and Extension for Progressive Agricultural Adjustments," *Journal of Farm Economics* 13, no. 1 (January 1931): 95-108; Alan I. Marcus, "The Wisdom of the Body Politic: The Changing Nature of Publicly Sponsored American Agricultural Research since the 1830s," *Agricultural History* 62, no. 2 (Spring 1988): 4-26.

⁵ Stark and Kilgore, *A Tribute to Dorothy Dickins*; Ted Ownby, "Gladys Presley, Dorothy Dickins, and the Limits of Female Agrarianism in Twentieth-Century Mississippi," in *Mississippi Women: Their History, Their Lives*, Vol. 2, edited by Martha Swain, et al (Athens: University of Georgia Press, 2010), 211-233; Ted Ownby, *American Dreams in Mississippi: Consumers, Poverty, and Culture, 1830-1998* (Chapel Hill: University of North Carolina Press, 1999), 98-109.

habits of Mississippi's families, from the food they ate and clothes they wore to the social relationships they developed. Home demonstration agents connected Dickins to teachers who facilitated her pioneering study of geophagy (dirt eating) among black residents of Oktibbeha County.⁶ Dickins relied on home economics instructors at the state's agricultural high schools to catalog and evaluate the living conditions in campus dormitories.⁷ Even when her own research assistants or local community members conducted the necessary inventories and surveys, Dickins relied on home demonstration agents to help her select her sites and make contacts. She trained those agents thoroughly and meticulously matched them to the regions and families she deemed appropriate. As a result, Dickins produced extension publications with a coherence and richness of detail that often exceeds that found in more famous WPA works, federal records, and exhaustive sociological studies. Dickins's local contacts and relationships made the difference.⁸

Dickins also built relationships with members of the experiment station and agricultural extension areas outside home economics research and home demonstration. She promoted the work of all these professionals and incorporated into her own studies the findings of experiment station researchers and extension agents regarding the quality of soils, the appropriate use of fertilizer, and the most advantageous organization of crops on a farm.

Again, these resources and relationships shaped Dickins's own studies. She consulted soils specialists when choosing families for her 1959 studies of the living conditions of representative black and white farm-operator families. She relied on work from her colleagues in the experiment stations to explain how farm women could improve their families' economic status, to compare the status of farm owners on poor soil with sharecroppers on rich soil, to suggest the importance of growing new crops—soybeans, for instance—that would enrich Mississippians' diets as well as their pocketbooks. Embedded in an active community of agricultural researchers, Dickins made full use of the expertise around her in conducting studies that bring the lives of Mississippians off the

⁶ Dorothy Dickins and Robert N. Ford, "Geophagy (Dirt Eating) among Mississippi Negro School Children," *American Sociological Review* 7, no. 1 (February 1942), 59-65.

⁷ Dorothy Dickins, "Agricultural High School Dormitories of Mississippi," Mississippi Agricultural Experiment Station Bulletin 293, August 1931.

⁸ Dickins, "Some Problems of Sampling in Connection with Studies of Family Economics," 329-331. The studies referenced in this essay are among Dickins's richest.

page.⁹

Dickins knew the importance of the work done around her, and she advocated for the importance of the work of land grant institutions in shaping policy as well. She joined a published debate regarding the place of the American Home Economics Association in lobbying and legislation during World War II and argued vigorously that experiment station and home economics researchers had an important place in policy debates.¹⁰

As part of this advocacy, Dickins led a successful campaign for state adoption of the fertilizer recommended by soil specialists, as well as a campaign to require the enrichment of flour, cornmeal, and grits in Mississippi with iron, vitamin B, and niacin—all nutrients she had demonstrated to be lacking in farmers' diets.¹¹ Dickins's own research was broad-ranging, and she repeatedly stressed the interconnections between the work of home economists and extension agents. For instance, in a study of iron content in vegetables, Dickins controlled for kinds of seed used, type of fertilizer applied, season, and location of planting to conclude that turnip greens were far richer in iron when planted in spring and in the state's Gulf Coast region. This study required the cooperation of Dickins's department, the state's experiment stations, and the extension and home demonstration agents who would guide farmers in their planting decisions.¹² The relationships that Dickins built with her colleagues gave her a broad vision for the function of land-grant research and extension, and she insisted that farmers needed both. This vision made Dickins a powerful and persuasive advocate for land-grant work.

Of course, to the twenty-first-century historian, many of Dickins's

⁹ Dorothy Dickins, "Levels of Living of Young Farmer-Operator Families in Mississippi," Mississippi Agricultural Experiment Station Bulletin 579, June 1959; Dorothy Dickins, "Levels of Living of Young Negro Farmer-Operator Families in Mississippi," Mississippi Agricultural Experiment Station Bulletin 580, July 1959; Dorothy Dickins, "Family Living on Poorer and Better Soil," Agricultural Experiment Station Bulletin 320, September 1937; Dorothy Dickins, "Owner Farm Families in Poor Agricultural Areas and Cropper Farm Families in Rich Agricultural Areas," Mississippi Agricultural Experiment Station Bulletin 359, June 1941; Dorothy Dickins, "The Place of Soybeans in the Diet," Mississippi Agricultural Experiment Station Information Sheet 41, 1934.

¹⁰ "Should the AHEA Abandon Legislative Work?," *Journal of Home Economics* 36, no. 9 (November 1944), p. 564-565.

¹¹ *Ibid.*

¹² Dorothy Dickins, "Variation in the Iron Content of Vegetables," 1940, folder 141: "Typed Reports of Dr. Dickins, 1940-47, box 3, Mississippi Cooperative Extension Service: Home Economics: Dorothy Dickins, 1945-1964. Congressional and Political Research Center, Mitchell Memorial Library, Mississippi State University.

subjects of study and still more of her assumptions and conclusions are as problematic as they are fascinating. For every historian who writes about land-grant institution researchers as actors themselves, there are others more concerned with the data available in experiment station documents. It is easy to dismiss the particular authors of those documents unless something in the documents seems to be in some way extraordinary. For many historians, the relationship then is more with the documents than with their authors. Fortunately, some of these authors and researchers, like Dorothy Dickins, built statewide—even national—reputations for their work, and even those historians who only incidentally write agricultural or environmental history often discover that these land-grant employees are in themselves vital and fascinating characters. Dickins's own evolving attitudes can illuminate the social, economic, and racial dynamics of mid-twentieth century Mississippi far more than her research alone.

As Ted Ownby has demonstrated, Dickins took a typically middle-class, progressive view toward her subjects of study. She staked her career on her ability to identify the problems—particularly problems of diet, health, and insufficient income—that held Mississippians back, and to fix those problems. She sometimes ignored the depth of the struggles her subjects of study faced, and she sometimes glossed over the impossibility of solving such problems in a segregated, inherently unequal labor system. Ownby describes Dickins's paternalism toward poor whites, focusing on her attitudes toward consumption and her early belief that rural women should make as much as possible at home rather than wasting precious resources on store-bought clothes and food.¹³

In one of her earliest studies, a detailed look at food and health among black farmers in the Mississippi Delta, Dickins wrote of framing her research questions to reflect “negro psychology,” and in describing her research to a more general audience, she characterized a black farmer's grocery shopping habits as akin to “an unsupervised six-year-old ... on his first visit to a cafeteria.”¹⁴ Such assumptions and observations are all too common in Dickins's writing, as they were in 1920s Mississippi—and across the nation.

¹³ Ownby, “Gladys Presley, Dorothy Dickins, and the Limits of Female Agrarianism,” 211-233; Ownby, *American Dreams in Mississippi*, 98-109.

¹⁴ Dorothy Dickins, “A Nutrition Investigation of Negro Tenants in the Yazoo-Mississippi Delta,” *Mississippi Agricultural Experiment Station Bulletin* 254, August 1928, p. 7.

Historians are accustomed to reading these sources as products of a particular time and place, and thus are attuned to the racial and class assumptions that underlay the research and programming of the 1920s–1960s. But Dickins is more surprising than predictable. Between the Great Depression and the 1950s, she joined many other Americans in changing her mind about the value of consumption, now considering it both a way to save women work and to make them aspire to more.¹⁵

If in the end Dickins's attitudes toward consumption paralleled that of many of her contemporaries, she seems to have taken a more independent approach to race. Her studies contain gross generalizations about race, but also a repeated emphasis on data that showed stark racial inequalities and challenged the cultural assumptions behind Jim Crow. For instance, in her inventory of black sharecroppers' homes, she begins predictably when she complains, "the average negro does not keep his home as clean as the average white person," and many "have low standards of cleanliness." But, she notes, "one should take into consideration the poor facilities for keeping clean in the average negro home. Running water and sewerage connections are unknown luxuries." Such a statement by no means made Dickins a racial liberal, even in mid-twentieth century Mississippi. Nonetheless, it illustrates a concern with unequal opportunity that pervades Dickins's studies.¹⁶

Repeatedly, Dickins began with cultural assumptions common to midcentury white southerners, only to dismantle them bit by bit with careful analysis and still more carefully phrased conclusions. When Dickins compared the diets of black sharecroppers with those of poor whites, she emphasized the "marked difference" between them in nutrition, and thus health, as the result of the small amount of food sharecroppers grew for their own consumption. Dickins noted that planters had moved sharecroppers' gardens into the cotton fields because they claimed farmers would ignore gardens near the house and would tear down the fences around them for firewood. But the farmers, she explained, claimed that the planters discouraged gardens altogether, preferring the land for raising cotton. The "negligence of the negro," she concluded, was no more the culprit for the absence of nutritious vegetables than "lack of

¹⁵ Ownby, *American Dreams in Mississippi*, 98-109.

¹⁶ Dickins, "A Nutrition Investigation of Negro Tenants in the Yazoo-Mississippi Delta," 10-11.

vision on the part of the planter.”¹⁷

At the same time that southern segregationists worked to employ eugenics and racial science in a renewed attempt to naturalize Jim Crow, Dorothy Dickins conducted studies of black and white Mississippians that emphasized income and class status as the key factors in health, social interaction, and family stability. She repeatedly deemphasized racial difference or explained it as a product of vast inequalities in income and wealth.¹⁸

For instance, in her 1942 study of geophagy, Dickins begins by generalizing about the unselfconsciousness with which black domestic workers discussed eating dirt—with the implication that any self-respecting person would want to deny the practice. She provided surveys for black teachers to give students about their eating habits, embedding dirt and clay in a checklist of commonly consumed foods. Her apparent assumption that black teachers weren’t smart enough to figure out what information she sought is absurd. But her conclusion, that dirt-eating was in fact a clever way of accessing iron otherwise unavailable to poor blacks, implicated an unequal economic system rather than racial difference.¹⁹

Dickins’s work was far from radical. It wasn’t even progressive on racial questions. Yet it quietly, indirectly, and repeatedly undercut the race- and class-based assumptions that justified Jim Crow. Although it is unclear that Dickins herself recognized the implications of her research, she repeatedly emphasized the effects of economic inequality on nutrition, purchasing options, health, quality of life, and social engagement and made careful and politic recommendations about improving living conditions under Jim Crow. But she pushed no further. There is no evidence that Dickins’s conclusions improved conditions for African Americans in Jim Crow Mississippi, though the nutrition, farming, and savings training she assigned to home demonstration agents certainly aimed to uplift black and white families in the state.

Perhaps Dickins believed that her scientific research spoke for itself, or perhaps she simply did not wish to critique segregation at all.

¹⁷ *Ibid.*, 17.

¹⁸ See, for instance, Dorothy Dickins, “Use, Knowledge, and Attitudes Concerning Milk Products by Homemakers,” Mississippi Agricultural Experiment Station Bulletin 642, April 1962; Dorothy Dickins, “Consumer Response to Selected In-Store Promotion of Cottage Cheese,” Mississippi Agricultural Experiment Station Bulletin 691, July 1964.

¹⁹ Dorothy Dickins and Robert N. Ford, “Geophagy (Dirt Eating) among Mississippi Negro School Children,” *American Sociological Review* 7, no. 1 (February 1942), 59-65.

Certainly, she understood that any explicit challenge of Jim Crow could jeopardize both her career and the hard work she had put into justifying and expanding the only predominantly female department within the agricultural experiment station at Mississippi State. Many white Mississippians made the same choice—such was the power of white supremacy.

If Dickins lamented that her subjects failed to “behave like test tube experiments,” the same was true of Dickins herself, and of all the scientists and researchers who choose the topics of land grant institutional research and who built the relationships necessary to conduct those studies. The wealth of statistics and thoughtful observations that Dickins and other land grant researchers accrued over the courses of their careers can provide the historian with a ground-level, detailed view of Mississippi’s past in all its human complexity. As Dickins’s four decades of carefully cultivated relationships and carefully curated commentary illustrates, the scientist’s data can also tell us a lot about the scientist herself.

